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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,170	12/31/2003	Steven L. Grobman	884.B79US1	5034

21186   7590   04/07/2009
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EXAMINER
SETO, JEFFREY K

ART UNIT	PAPER NUMBER
2458	

MAIL DATE	DELIVERY MODE
04/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/750,170	GROBMAN ET AL.
	Examiner	Art Unit	
	Jeffrey Seto	2458	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 December 2003</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-54</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-54</u> is/are rejected.
7)☒ Claim(s) <u>6,8,19,21,26,35,37 and 48</u> is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>31 December 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
       1.☐ Certified copies of the priority documents have been received.
       2.☐ Certified copies of the priority documents have been received in Application No. _____.
       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-54 are pending.

Claim Objections

2.   Claims 6, 8, 19, 21, 26, 35, 37 & 48 are objected to because of the following
informalities:

    a.   Regarding claim 6, "success of failure" in line 9, should be changed to
"success or failure".

    b.   Regarding claim 8, the claim recites the exact same limitations as those
in claim 7.

    c.   Regarding claim 19, "the first caller is remote application user" in line 1,
should be changed to "the first caller is a remote application user".

    d.   Regarding claim 21, "DSML" in line 2, and "LDAP" in line 5, should each
be spelled out, so that it is clear what each acronym stands for.

    e.   Regarding claim 26, "success of failure" in line 14, should be changed to
"success or failure".

    f.   Regarding claim 35, "success of failure" in line 10, should be changed to
"success or failure".

    g.   Regarding claim 37, the claim recites the exact same limitations as those
in claim 36.

    h.   Regarding claim 48, "the first caller is remote application user" in lines 1-2,
should be changed to "the first caller is a remote application user".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

3.   Claims 10 & 39 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

      a.   Regarding claim 10, "the set" in line 2, lacks antecedent basis.

      b.   Regarding claim 39, "the set" in line 2, lacks antecedent basis.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

4.   Claims 30-54 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

5.   Regarding claims 30-54, each claim is directed toward a "machine readable

medium". Page 6, lines 10-15 of the specification state that the machine readable

medium can be electrical, optical and acoustical signals, including carrier waves and

infrared signals, none of which are statutory subject matter. The specification also

mentions the medium can be a ROM, RAM and magnetic disk, however, the claims

must be read as broadly as possible, in light of the specification. Thus, the above

claims currently include non-statutory subject matter, and are not patentable. Applicant

can overcome this rejection by removing the offending language, i.e., any mention of

waves and signals as the medium, from the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1, 2, 5, 15-20, 30, 31, 34, 40 & 44-49 rejected under 35 U.S.C. 103(a) as

being unpatentable over U.S. Patent No. 7,103,589 issued to Kepler, et al. (Kepler), in

view of U.S. Patent No. 6,879,564 issued to Parham, et al. (Parham).

7.   Regarding claim 1, Kepler teaches a method comprising: receiving a first request

to perform a write operation on one of a plurality of data stores, wherein the one of the

plurality of data stores is undetermined (See column 3, lines 32-34, and col. 15, lines

64-65; wherein the request can be a write), and wherein the first request includes an

identifier (See col. 6, lines 21-24, and col. 14, lines 16-18; wherein one of the fields,

including the "route by" field, can include the identifier); creating a second request,

wherein the second request requests performance of the write operation (See col. 3,

lines 34-36; wherein the modified search request is the second request); determining

the one of the plurality of data stores to which the second request will be transmitted

(See col. 3, lines 36-37; wherein the examination of the search-routing database

determines "the one"); and transmitting the second request to the one of the plurality of

data stores (See col. 3, lines 40-42; wherein the request is sent to the database

identified in the search-routing database). Kepler does not disclose that the data stores

are multi-master data stores, the identifier includes an optimization technique, nor that

the determining includes using the optimization technique associated with an

optimization technique identifier. However, Parham teaches the data stores are multi-

master data stores (See col. 1, lines 45-48), an optimization technique (See col. 4, lines

40-45; wherein the shortest path algorithm is the optimization technique), and that the

determining includes using the optimization technique (See col. 4, lines 54-57). Using

the features of Parham in the system of Kepler would have expanded the capabilities of

Kepler to included distributed databases, and would have made the system more cost

effective and efficient by allowing the system to use the shortest and cheapest paths to

desired databases. Therefore, it would have been obvious to one of ordinary skill in the

art, at the time of the invention, to combine the teachings of Parham with Kepler.

8.   Regarding claim 2, Kepler teaches the plurality of data stores are directory

servers (See col. 5, lines 4-6, and col. 7, lines 3-6).

9.   Regarding claim 5, Parham teaches the first request includes additional

optimization technique identifiers (See col. 7, lines 43-46; wherein a technique other

than "shortest path" is disclosed for replication purposes). Using the features of Parham

in the system of Kepler would have increased the abilities of Kepler to included multi-

master databases, and would have made sure that the most cost effective paths,

between write-able databases, were used during the replication process. Therefore, it

would have been obvious to one of ordinary skill in the art, at the time of the invention,

to combine the teachings of Parham with Kepler.

10.   Regarding claim 11, Kepler teaches a method comprising: creating a first

transaction request, wherein the first transaction request includes an identifier for

determining to which one of a plurality of servers a second transaction request is

transmitted (See col. 3, lines 32-34, and col. 14, lines 16-18; wherein the route-by field

is the identifier); and transmitting the first transaction request to an intermediate server

(See col. 3, lines 34-37; wherein the search-routing database is the intermediate

server). Kepler does not teach an optimization technique, nor that the servers are multi-

master servers. However, Parham teaches an optimization technique (See col. 4, lines

40-45; wherein the shortest path algorithm is the optimization technique), and that the

the servers are multi-master servers (See col. 1, lines 45-48). Using the features of

Parham in the system of Kepler would have expanded the capabilities of Kepler to

included distributed databases, and would have made the system more cost effective

and efficient by allowing the system to use the shortest and cheapest paths to desired

databases. Therefore, it would have been obvious to one of ordinary skill in the art, at

the time of the invention, to combine the teachings of Parham with Kepler.

11.   Regarding claim 15, Kepler teaches a method comprising: selecting a first one of

a set of geographically distributed data stores based on proximity of the first one to a

first principal, a first object, or a first caller (See col. 9, lines 52-57; wherein the user is

the first principal); and transmitting a first write request to the first one of the set of

geographically distributed data stores (See col. 15, lines 61-65; wherein an insertion

operation is a write operation). Kepler does not disclose that the data stores are multi-

master data stores. However, Parham teaches multi-master data stores (See col. 1,

lines 45-48). Using the features of Parham in the system of Kepler would have

expanded the capabilities of Kepler to included distributed databases, thereby

increasing the customer base of Kepler. Therefore, it would have been obvious to one

of ordinary skill in the art, at the time of the invention, to combine the teachings of

Parham with Kepler.

12.   Regarding claim 16, Kepler further teaches the set includes a directory server

(See col. 5, lines 4-6, and col. 7, lines 3-6).

13.   Regarding claim 17, Kepler further teaches the first principal is a computer user

(See col. 9, lines 55-57).

14.   Regarding claim 18, Parham teaches the first object is a computer (See col. 4,

lines 54-57). Using the features of Parham in the system of Kepler would have allowed

the system to compute the closest database to the user, based on the computer and not

the user. Thereby allowing any user to enjoy the capabilities of the system. Therefore,

it would have been obvious to one of ordinary skill in the art, at the time of the invention,

to combine the teachings of Parham with Kepler.

15.   Regarding claim 19, Kepler further teaches the first caller is a remote application

user (See col. 9, lines 55-57).

16.   Regarding claim 20, Parham teaches selecting a second one of the set based on proximity of the second one to a second principal, a second object, or a second caller (See col. 4, lines 59-61; wherein next closest server is "the second one"); and transmitting a second write request to the second one of the set (See col. 6, lines 61-67; wherein replication of data includes write requests). Using the features of Parham in the system of Kepler would have allowed the system to have a second choice, or backup server, in case there were any problems with the first choice of servers. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

17.   Regarding claim 30, this claim recites a machine-readable medium with instructions for carrying out the method of claim 1, and is rejected for the same reasons.

18.   Regarding claim 31, this claim recites a machine-readable medium with instructions for carrying out the method of claim 2, and is rejected for the same reasons.

19.   Regarding claim 34, this claim recites a machine-readable medium with instructions for carrying out the method of claim 5, and is rejected for the same reasons.

20.   Regarding claim 40, this claim recites a machine-readable medium with instructions for carrying out the method of claim 11, and is rejected for the same reasons.

21.   Regarding claim 44, this claim recites a machine-readable medium with instructions for carrying out the method of claim 15, and is rejected for the same reasons.

22.   Regarding claim 45, this claim recites a machine-readable medium with instructions for carrying out the method of claim 16, and is rejected for the same reasons.

23.   Regarding claim 46, this claim recites a machine-readable medium with instructions for carrying out the method of claim 17, and is rejected for the same reasons.

24.   Regarding claim 47, this claim recites a machine-readable medium with instructions for carrying out the method of claim 18, and is rejected for the same reasons.

25.   Regarding claim 48, this claim recites a machine-readable medium with instructions for carrying out the method of claim 19, and is rejected for the same reasons.

26.   Regarding claim 49, this claim recites a machine-readable medium with instructions for carrying out the method of claim 20, and is rejected for the same reasons.

27.   Claims 3, 6, 9, 10, 12, 13, 26, 29, 32, 35, 38, 39, 41 & 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham, as applied to claims 1, 11, 30 & 40 above, and further in view of U.S. Patent Application Publication No. 2004/0083479 to Bondarenko, et al. (Bondarenko).

28.   Regarding claim 3, Kepler in view of Parham teach the invention as described in claim 1. Kepler and Parham do not teach the first request includes code of the

Directory Services Markup Language. However, Bondarenko teaches the use of

Directory Services Markup Language (DSML) (See paragraph 87, lines 8-13). Using

the features of Bondarenko in the system of Kepler in view of Parham would have

allowed the system to take advantage of the capabilities offered by DSML, including

expressing directory queries, updates and results in an XML application. Therefore, it

would have been obvious to one of ordinary skill in the art, at the time of the invention,

to combine the teachings of Bondarenko with Parham and Kepler.

29.   Regarding claim 6, Kepler teaches a method comprising: receiving in a directory

server a request to modify a directory, wherein the request is received from a server

(See col. 3, lines 32-36), and wherein the server selected the directory server based on

a technique associated with a technique identifier included in a request (See col. 14,

lines 16-18; wherein the route-by field is the technique identifier); modifying the directory

(See col. 15, lines 61-64; wherein delete/insert is the modification); and transmitting a

response to the server, wherein the response indicates success or failure of the

modification (See col. 3, lines 38-40; wherein the responsive data indicates success or

failure). Further, regarding claim 6, Parham teaches an optimization technique that is

used to select a server (See col. 4, lines 40-45; wherein the shortest path algorithm is

the optimization technique). Kepler, in view of Parham, do not teach the server is a

Directory Services Markup Language (DSML) server. However, Bondarenko teaches

the use of a DSML server (See par. 87, lines 8-13). Using the features of Bondarenko

in the system of Kepler in view of Parham would have allowed the system to take

advantage of the capabilities offered by DSML, including expressing directory queries,

updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

30.   Regarding claim 9, Kepler in view of Parham and Bondarenko teach the invention as described in claim 6. Bondarenko further teaches the request is formatted according to the Directory Services Markup Language (See col. 87, lines 8-13).

31.   Regarding claim 10, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 6. Kepler further teaches the optimization technique is selected from a set consisting of: closest to caller, closest to principal or object, and closest to dynamic object X (See col. 9, lines 52-57; wherein the user is the caller/principal).

32.   Regarding claim 12, Kepler, in view of Parham, teach the invention as described in claim 11. Kepler and Parham do not teach the first transaction request includes Directory Services Markup Language code. However, Bondarenko teaches the first transaction request includes Directory Services Markup Language code (See par. 87, lines 8-13). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

33.   Regarding claim 13, Kepler, in view of Parham, teach the invention as described

in claim 11. Kepler and Parham do not teach the first transaction request includes a

Simple Object Access Protocol (SOAP) comment, wherein the SOAP comment includes

the optimization technique identifier. However, Bondarenko teaches the first transaction

request includes a Simple Object Access Protocol (SOAP) comment, and wherein the

SOAP comment includes the optimization technique identifier (See par. 56, lines 1-6,

and par. 57, lines 1-7; wherein the entire request is transported using SOAP). Using the

features of Bondarenko in the system of Kepler in view of Parham would have allowed

the system to take advantage of the capabilities offered by SOAP, including transporting

requests in a standard and accepted web-based protocol. Therefore, it would have

been obvious to one of ordinary skill in the art, at the time of the invention, to combine

the teachings of Bondarenko with Parham and Kepler.

34.   Regarding claim 26, Kepler teaches a system comprising: a processor (40); a

dynamic random access memory unit (42); a machine readable medium including

instructions for performing the following operations, receiving in a directory server a

request to modify a directory, wherein the request is received from a server (See col. 2,

lines 32-36), and wherein the server selected the directory server based on an

technique associated with a technique identifier included in a request (See col. 14, lines

16-18); modifying the directory (See col. 15, lines 61-64); and transmitting a response to

the server, wherein the response indicates success of failure of the modification (See

col. 3, lines 38-40). Further, regarding claim 26, Parham teaches an optimization

technique that is used to select a server (See col. 4, lines 40-45). Kepler and Parham

do not teach the server is a Directory Services Markup Language (DSML) server.

However, Bondarenko teaches the use of a Directory Services Markup Language

(DSML) server (See par. 87, lines 8-13). Using the features of Bondarenko in the

system of Kepler in view of Parham would have allowed the system to take advantage

of the capabilities offered by DSML, including expressing directory queries, updates and

results in an XML application. Therefore, it would have been obvious to one of ordinary

skill in the art, at the time of the invention, to combine the teachings of Bondarenko with

Parham and Kepler.

35.   Regarding claim 29, Kepler in view of Parhma and Bondarenko teach the

invention as described in claim 26. Kepler further teaches the optimization technique is

selected from a set consisting of: closest to caller, closest to principal or object, and

closest to dynamic object X (See col. 9, lines 52-57).

36.   Regarding claim 32, this claim recites a machine-readable medium with

instructions for carrying out the method of claim 3, and is rejected for the same reasons.

37.   Regarding claim 35, this claim recites a machine-readable medium with

instructions for carrying out the method of claim 6, and is rejected for the same reasons.

38.   Regarding claim 38, this claim recites a machine-readable medium with

instructions for carrying out the method of claim 9, and is rejected for the same reasons.

39.   Regarding claim 39, this claim recites a machine-readable medium with

instructions for carrying out the method of claim 10, and is rejected for the same

reasons.

40.   Regarding claim 41, this claim recites a machine-readable medium with instructions for carrying out the method of claim 12, and is rejected for the same reasons.

41.   Regarding claim 42, this claim recites a machine-readable medium with instructions for carrying out the method of claim 13, and is rejected for the same reasons.

42.   Claims 4, 14, 33 & 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham, as applied to claims 1, 11, 30 & 40 above, and further in view of U.S. Patent No. 7,376,827 issued to Jiao.

43.   Regarding claim 4, Kepler, in view of Parham, teach the invention as described in claim 1. Kepler and Parham do not teach the second request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, in view of Parham, would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao with the system of Kepler and Parham.

44.   Regarding claim 14, Kepler, in view of Parham, teach the invention as described in claim 11. Kepler and Parham do not teach the second transaction request is

formatted according to the Lightweight Directory Access Protocol (LDAP). However,

Jiao teaches formatting requests according to the Lightweight Directory Access Protocol

(See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, in view of

Parham, would have allowed the system to take advantage of mechanisms offered by

LDAP, including the ability to determine the structure of information in a directory, and

the ability to receive paged information delivery. Therefore, it would have been obvious

to one of ordinary skill in the art, at the time of the invention, to combine the teachings of

Jiao with the system of Kepler and Parham.

45.   Regarding claim 33, this claim recites a machine-readable medium with

instructions for carrying out the method of claim 4, and is rejected for the same reasons.

46.   Regarding claim 43, this claim recites a machine-readable medium with

instructions for carrying out the method of claim 14, and is rejected for the same

reasons.

47.   Claims 7, 8, 21-24, 27, 28, 36, 37 & 50-53 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Kepler, in view of Parham and Bondarenko, and further in

view of Jiao.

48.   Regarding claim 7, Kepler, in view of Parham and Bondarenko, teach the

invention as described in claim 6. Kepler, in view of Parham and Bondarenko, do not

teach the request is formatted according to the Lightweight Directory Access Protocol

(LDAP). However, Jiao teaches formatting requests according to the Lightweight

Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the

system of Kepler, in view of Parham and Bondarenko, would have allowed the system

to take advantage of mechanisms offered by LDAP, including the ability to determine

the structure of information in a directory, and the ability to receive paged information

delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the

time of the invention, to combine the teachings of Jiao with the system of Kepler and

Parham.

49.   Regarding claim 8, this claim is an exact duplicate of claim 7, and is rejected for

the same reasons.

50.   Regarding claim 21, Kepler teaches a method comprising: receiving a request,

wherein the request includes, a technique identifier (See col. 3, lines 32-34, and col. 14,

lines 16-18); and a first set of one or more directory server write requests (See col. 15,

lines 64-65); creating a second set of one or more requests, wherein each of the

requests includes at least one of the directory server write requests (See col. 3, lines

34-36); determining to which of a third set of geographically distributed directory servers

the requests will be transmitted, wherein the determining includes using a technique

associated with the technique identifier (See col. 3, lines 36-37, and col. 14, lines 16-

18), and wherein the technique selects those of the third set of servers based on a

network location of one or more principals and one or more objects (See col. 9, lines 52-

59); and transmitting ones of the second set of requests to ones of the third set of

servers (See col. 3, lines 40-42). Kepler does not teach that the request is a DSML

request, an optimization technique, the one or more requests are LDAP requests, nor

that the servers are multi-master servers. However: Parham teaches an optimization

technique that is used to select a server (See col. 4, lines 40-45), and the use of multi-

master servers (See col. 1, lines 45-48); Bondarenko teaches the use of DSML servers

(See par. 87, lines 8-13); and, Jiao teaches the use of one or more LDAP requests (See

col. 6, lines 41-43). Using the features of Parham in the system of Kepler would have

expanded the capabilities of Kepler to included distributed databases, and would have

made the system more cost effective and efficient by allowing the system to use the

shortest and cheapest paths to desired databases. Using the features of Bondarenko in

the system of Kepler would have allowed the system to take advantage of the

capabilities offered by DSML, including expressing directory queries, updates and

results in an XML application. Using the features of Jiao in the system of Kepler would

have allowed the system to take advantage of mechanisms offered by LDAP, including

the ability to determine the structure of information in a directory, and the ability to

receive paged information delivery. Therefore, it would have been obvious to one of

ordinary skill in the art, at the time of the invention, to combine the teachings of Parham,

Bondarenko and Jiao in the system of Kepler.

51.   Regarding claim 22, Kepler, in view of Parham, Bondarenko and Jiao, teach the

invention as described in claim 21. Parham further teaches the use of a secondary

optimization technique (See col. 7, lines 43-46; wherein a technique other than shortest

path is used).

52.   Regarding claim 23, Kepler, in view of Parham, Bondarenko and Jiao, teach the

invention as described in claim 21. Bondarenko further teaches the optimization

technique identifier is located in a SOAP comment (See par. 56, lines 1-6, and par. 57, lines 1-7; wherein the entire request is transported using SOAP).

53.   Regarding claim 24, Kepler, in view of Parham, Bondarenko and Jiao, teach the invention as described in claim 21. Jiao further teaches the network location of the one or more principals and the one or more objects is determined using one or more of a set of network location services (See col. 8, lines 7-9; wherein Domain Name System (DNS) is the location service).

54.   Regarding claim 27, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 26. Kepler, in view of Parham and Bondarenko, do not teach the request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, Parham and Bondarenko would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao in the system of Kepler, Parham and Bondarenko.

55.   Regarding claim 28, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 26. Kepler, in view of Parham and Bondarenko, do not teach the second request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the

Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, Parham and Bondarenko would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao in the system of Kepler, Parham and Bondarenko.

56.   Regarding claim 36, this claim recites a machine-readable medium with instructions for carrying out the method of claim 7, and is rejected for the same reasons.

57.   Regarding claim 37, this claim is an exact duplicate of claim 36, and is rejected for the same reasons.

58.   Regarding claim 50, this claim recites a machine-readable medium with instructions for carrying out the method of claim 21, and is rejected for the same reasons.

59.   Regarding claim 51, this claim recites a machine-readable medium with instructions for carrying out the method of claim 22, and is rejected for the same reasons.

60.   Regarding claim 52, this claim recites a machine-readable medium with instructions for carrying out the method of claim 23, and is rejected for the same reasons.

61.   Regarding claim 53, this claim recites a machine-readable medium with

instructions for carrying out the method of claim 24, and is rejected for the same

reasons.

62.   Claims 25 & 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Kepler, in view of Parham, Bondarenko and Jiao, as applied to claims 21 & 50 above,

and further in view of U.S. Patent Application Publication No. 2003/0120502 to Robb, et

al. (Robb), and U.S. Patent No. 6,006,331 to Chu, et al. (Chu).

63.   Regarding claim 25, Kepler, in view of Parham, Bondarenko and Jiao, teach the

invention as described in claim 21. Kepler, in view of Parham, Bondarenko and Jiao, do

not teach the set of network location services include Session Initiation Protocol (SIP),

and Internet Locator Service (ILS). However, Robb teaches the Session Initiation

Protocol as a network location service (See par. 3, line 68), and Chu teaches the

Internet Locator Service (ILS) as a network location service (See col. 5, lines 34-35).

Using the features of Robb and Chu in the system of Kepler, in view of Parham,

Bondarenko and Jiao, would have expanded the locating capabilities of the system,

thereby allowing faster location of servers, computers and users, and possibly locating

more servers, computers and users than otherwise possible. Therefore, it would have

been obvious to one of ordinary skill in the art, at the time of the invention, to combine

the teachings of Robb and Chu in the system of Kepler, in view of Parham, Bondarenko

and Jiao.

64.   Regarding claim 54, this claim recites a machine-readable medium with

instructions for carrying out the method of claim 25, and is rejected for the same

reasons.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jeffrey Seto whose telephone number is (571)270-7198.

The examiner can normally be reached on Monday thru Thursday and alt. Fridays, 9:30

AM-7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph E. Avellino can be reached on (571) 272-3905. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

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JKS
4/1/2009

/Joseph E. Avellino/
Primary Examiner, Art Unit 2446